



TIP122 (NPN)

TIP127 (PNP)

用途

发动机点火
高频开关电源
高频功率变换
一般功率放大电路

APPLICATIONS

Engine ignition
High frequency switching power supply
High frequency power transform
Commonly power amplifier circuit

产品特性

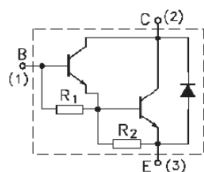
TIP122与TIP127互补
高电流容量
高开关速度
高可靠性
RoHS 产品

FEATURE

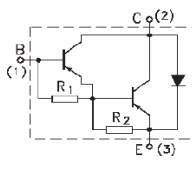
Complementary TIP122 to TIP127
High current capability
High switching speed
High reliability
RoHS product

封装 Package

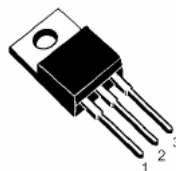
TO-220



$R1 \approx 8k\Omega$
 $R2 \approx 0.12k\Omega$



$R1 \approx 8k\Omega$
 $R2 \approx 0.12k\Omega$



1. 基极 BASE
2. 集电极 COLLECTOR
3. 发射极 EMITTER

绝对最大额定值Absolute Ratings (Tc=25℃)

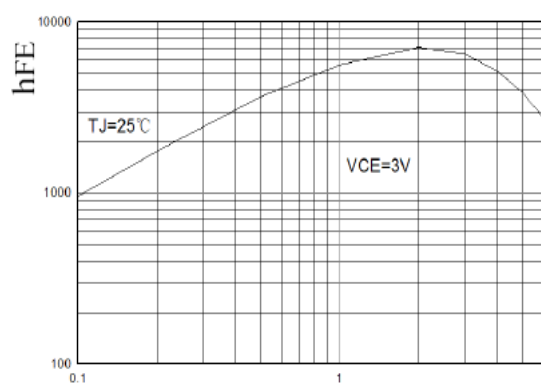
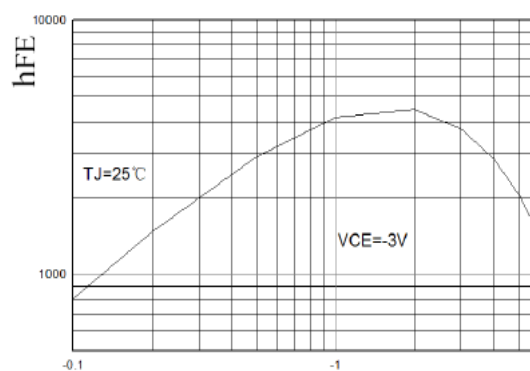
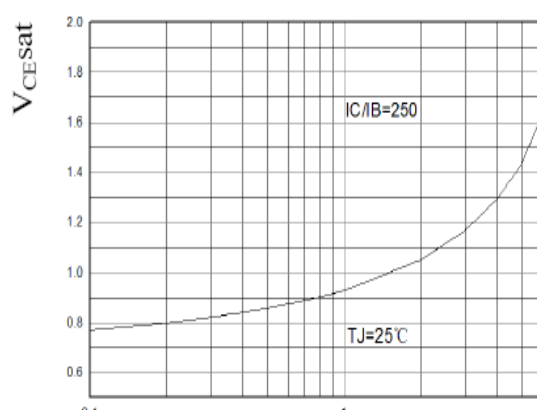
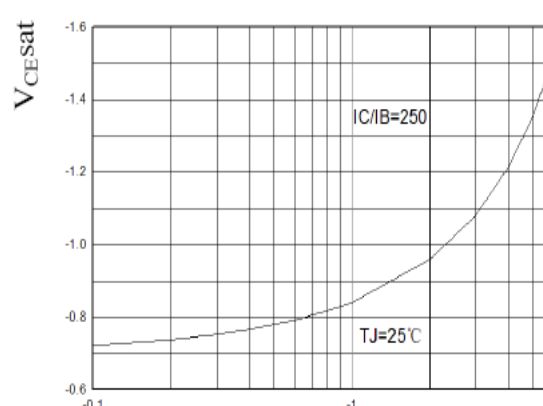
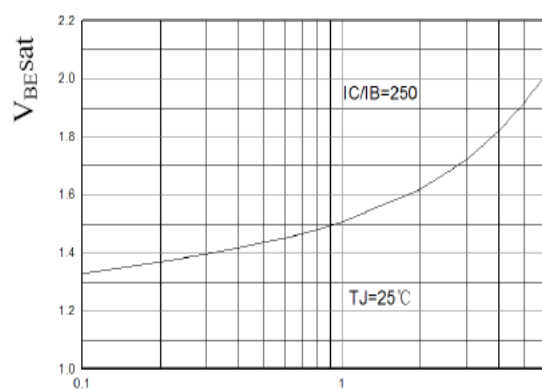
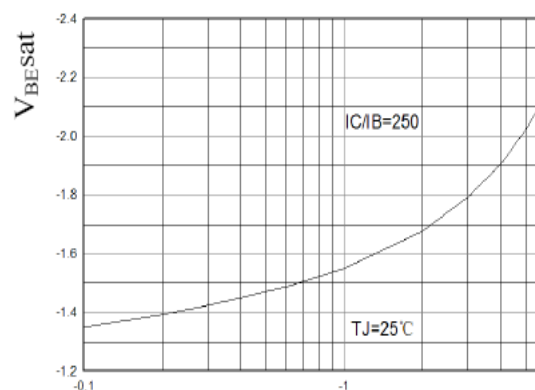
项目 Parameter	符号Symbol	数值Value	单位Unit
集电极-发射极直流电压 Collector-Base Voltage	V_{CBO}	100/-100	V
集电极-发射极直流电压 Collector-Emitter Voltage	V_{CEO}	100/-100	V
发射极-基极直流电压 Emitter-Base Voltage	V_{EBO}	5/-5	V
最大集电极电流 Collector Current(DC)	I_C	5/-5	A

最大集电极电流 Collector Current(Pulse)	I_{CP}	8/-8	A
最大基极电流 Base Current	I_B	120/-120	mA
最大集电极耗散功率 Total Dissipation	P_C	65	W
最高结温 Operating Junction Temperature	T_J	+150	°C
存储温度 Storage Temperature Range	T_{STG}	-55~+150	°C

电特性 Electrical Characteristics

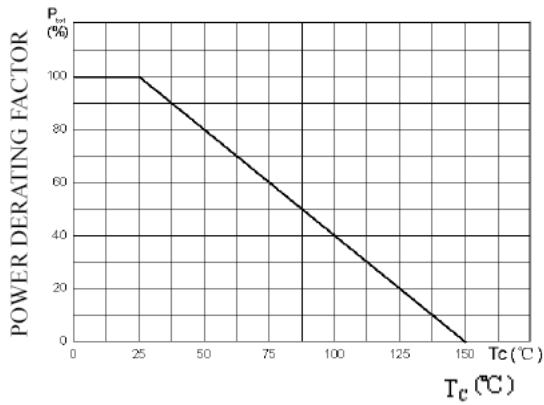
项 目 Parameter	测试条件 Tests conditions	最小 Min	典型 Typ	最大 Max	单位 Units
$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	100/-100	-	-	V
$V_{(BR)CBO}$	$I_C=1mA, I_B=0$	100/-100	-	-	V
V_{EBO}	$I_E=1mA, I_C=0$	5/-5	-	-	V
I_{CBO}	$V_{CBO}=100V, I_E=0$	-	-	0.2/-0.2	mA
I_{CEO}	$V_{CEO}=50V, I_B=0$	-	-	0.5/-0.5	mA
I_{EBO}	$V_{EBO}=5V, I_C=0$	-	-	2/-2	mA
$hFE1$	$V_{CE}=3V, I_C=0.5A$	1000	-	-	-
$hFE2$	$V_{CE}=3V, I_C=3A$	1000	-	-	-
V_{CESAT}	$I_C=3A, I_B=12mA$	-	-	2/-2	V
V_{CESAT}	$I_C=5A, I_B=20mA$	-	-	4/-4	V
V_{BESAT}	$I_C=3A, I_B=12mA$	-	-	2.5/-2.5	V
$R_{th(j-c)}$	结到管壳的热阻 Thermal Resistance Junction Case	-	-	1.932	°C/W

特性曲线 ELECTRICAL CHARACTERISTICS (curves)

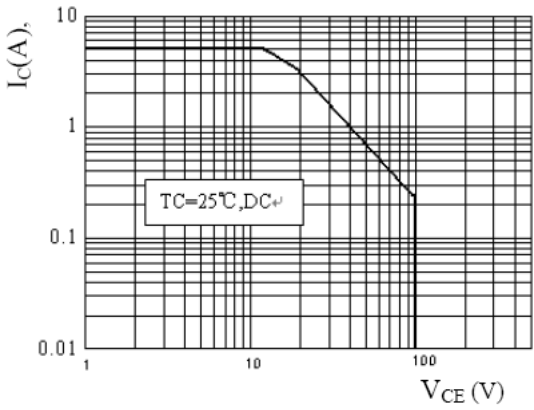
HFE vs I_C (TIP122)HFE vs I_C (TIP127) $V_{CE(sat)}$ vs I_C (TIP122) $V_{CE(sat)}$ vs I_C (TIP127) $V_{BE(sat)}$ vs I_C (TIP122) $V_{BE(sat)}$ vs I_C (TIP127)

特性曲线 ELECTRICAL CHARACTERISTICS (curves)

Pc vs Tc



SOA



外形尺寸 PACKAGE MECHANICAL DATA

TO-220

